

REMARKS

Applicants would like to thank the Examiner for the careful consideration given to the present application and for the courtesy of inquiring on the status of this application. The application has been reviewed in light of the Office Action. Applicants respectfully submit that the claims are patentable over the cited references for at least the reasons set forth below, and favorable action is requested.

Applicant has added new Claim 31 to reflect Examiner's statement that claim 3 is allowable over the prior art. New Claim 31 presents claim 3 as written in independent form.

Applicants have amended claim 1 and submit that claim 1 and those claims depending from it are patentable over the cited references for at least the reasons set forth below, and as such, favorable action is requested.

Applicants note that Claims 3, 8-14, 17 and 28-30 have been allowed.

Claim Rejections – 35 U.S.C. 103

The Examiner has rejected claims 1, 2, 4-7, 15, 16 and 27 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,176,103 to Cruden et al. in light of U.S. Patent No. 5,102,936 to Huth et al.

The Examiner cites the Cruden et al. patent as showing a polymer latex useful in coating and binder compositions, wherein the polymer latex is derived from carbonyl-containing monomers, such as diacetone acrylamide. The Examiner cites the Huth et al. patent as showing a copolymer dispersion useful as a thickener, wherein the copolymer dispersion is derived from ethylenically unsaturated monomers. The Examiner states that Cruden et al. differs from the instant Claim 1 as defined by (b), which recites the characteristics of a second polymer. The Examiner asserts that Cruden et al. teaches that coating compositions derived from the modified polymer latexes described in Cruden et al. can include materials such as thickeners, dispersing agents, etc., and that it would have been obvious to one having ordinary skill in the art to use the copolymer dispersion of the Huth et al. patent as a thickener in the aqueous system of Cruden et al. to teach Applicants' Claim 1. Moreover, in the Examiner's Response to Applicant's previous arguments in favor of patentability, the Examiner states "Since the copolymers of Huth et al.

overlap in scope with the second polymer (b) per the claimed invention, latent-crosslinking properties would be expected to be possessed by the co-polymers of Huth et al. Moreover, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis of patentability.” Applicants respectfully disagree with the Examiner’s analysis.

Applicants submit that Cruden et al. in combination with Huth et al. does not disclose that claimed in Claim 1 of the subject invention. Applicants have amended claim 1 to include that the copolymerizable monoethylenically binder polymer of (a) contains latent crosslinking functionality. This amendment further differentiates Applicants invention from the Cruden et al. and Huth et al. patents. Neither Cruden et al. nor Huth et al. disclose latent crosslinking functionality that is associated with the copolymerizable monoethylenically unsaturated monomers recited in currently amended claim 1, and therefore, not all of the claim limitations of the subject application are found in the cited prior art.

Moreover, contrary to the Examiner’s assertions, Applicants submit that the copolymers of Huth et al. *do not* overlap in scope with the second polymer (b) *because* the copolymer described in Huth et al. does not possess latent crosslinking properties. The latent crosslinking capabilities of the second polymer serve to define the requisite functionality requirement of the second polymer, and not a characteristic that is within the scope of the teaching of the polymer in Huth et al.

Latent crosslinking functionally is a characteristic that can neither be expected nor implied based on the disclosure of Huth. Latent crosslinking properties are not a characteristic of conventional thickeners, such as the one described in Huth. In fact, the Huth et al. patent specifically provides for monomers that are capable of *crosslinking*. Such crosslinking does not suggest *latent* crosslinking, but rather, is consistent with the crosslinking that typically takes place during the initial stage of polymer production. Throughout the patent, Huth et al. lends no support or suggestion for the use of a monomer with latent crosslinking capability. There is no disclosure that crosslinking can occur, or desired to occur, after initial polymer formation and post-cure.

Applicants claim recites latent crosslinking functionality as a feature that the monomer must possess, not a feature that the monomer conventionally possesses. Applicants invention specifies that latent crosslinking is an important characteristic in the formation of the coating

composition described in the subject application. It is the novel approach that Applicants have discovered, i.e., the use of the combination of a binder polymer polymerized from one or more copolymerizable monoethylenically unsaturated monomers *containing latent crosslinking functionality* and a second polymer polymerized from monomers comprising a monoethylenically unsaturated monomer *containing latent crosslinking functionality*, that is distinguishable from the cited art.

Possessing the latent crosslinking properties, as the Applicants have described and claimed, is an element that is missing from both cited references. Though the Examiner states that “applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art,” on the contrary, Huth et al. in no way suggests latent crosslinking, or latent crosslinking functionality. Those skilled in the art would understand that conventional thickeners and dispersants do not possess the functionality for latent crosslinking. Rather, polymers, once formed, do not have any effect on promoting further crosslinking in a post-cure environment (as compared with the latent crosslinking claimed by Applicants). Latent crosslinking is an additional element to polymer formation that must be actively sought. Those skilled in the art would recognize that latent crosslinking functionality is not an element that would flow naturally from the teaching of crosslinking alone.

Applicants have discovered that by providing for a polymer that possesses post-cure crosslinking properties, unexpected results, such as increased chemical resistance, corrosion resistance, and humidity resistance, can be obtained.

For at least the foregoing reasons, Applicants believe that at least the factor that “prior art references when combined must teach or suggest all the claim limitations,” which is required for a prima facie showing of obviousness has not been met by the prior art references cited by the Examiner. Neither Cruden et al. nor Huth et al. disclose a coating composition that has latent crosslinking functionality. Applicants submit that independent claim 1 is patentable over the cited references. Applicants consider it apparent that claims 2, 4-7, 15, 16 and 27 are also patentable over the cited references because they depend from claim 1 and recite additional novel features of the present invention.

In light of the foregoing, it is respectfully submitted that all of the claims of the present application are in condition for allowance and notice to that effect is hereby requested.

Respectfully submitted,

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